ABSTRACT

A leakage detection apparatus is provided, capable of performing high-speed leakage detection during startup of a motor-vehicle such as an HEV. The apparatus includes a signal generator 31 for generating a signal whose frequency is set variably, a resistor 33 for attenuating the signal in cooperation with an insulation resistor between a high-voltage circuit 10 and a low-voltage circuit 20, a coupling capacitor 34 for capacitance-coupling one end of a resistant element to the high-voltage circuit, an LPF 35 whose cut-off frequency is set variably, for attenuating a high frequency component via the capacitive element to be superimposed on the signal via the resistant element, a leakage detection portion 381 for comparing an amplitude level of the signal via the LPF with a predetermined threshold value so as to detect the presence or absence of leakage between the high-voltage circuit and the low-voltage circuit, and a control portion 382 for setting the signal frequency of the signal generator and the cut-off frequency of the LPF after startup of the low voltage circuit and before startup of the high-voltage circuit to be higher than those after startup of the high-voltage circuit.